

Unintended Pregnancy and Birth

Definition: Pregnancies or births that are identified by the mother as either unwanted or mistimed (occurring earlier than wanted) at the time of conception.

Summary

An estimated 55% of all pregnancies in Washington in 1993 and 1994 were unintended. They accounted for 40% ($\pm 4\%$) of all births.

Data from the 1990 National Survey of Family Growth (NSFG) indicate that 57% of all pregnancies and 44% of all US births were unintended at the time of conception.

Unintended pregnancy is a risk factor for late or inadequate prenatal care, low birth weight, neonatal death, domestic violence, child abuse, and exposure of the fetus to harmful substances like tobacco, alcohol, and other drugs. It is associated with social and economic co-factors like economic hardship, failure to achieve educational and career goals, marital dissolution, and spousal abuse. It often precludes couples from taking advantage of pre-conceptional risk identification. Most of the 26,000 annual abortions in Washington are the result of unintended pregnancies.

Time Trends

Washington began tracking this indicator in 1993 through the Pregnancy Risk Assessment Monitoring System (PRAMS, see Technical Notes). Therefore, state time trends are not yet available at the state level. Nationally, NSFG data indicate that births resulting from unintended pregnancies increased from 37% in 1982 to 44% in

1990. Preliminary data from the 1993 National Survey of Families and Households indicate this increase continued into the early 1990s.¹

Year 2000 Goal

The national goal is to reduce the percentage of all pregnancies (births and abortions) that are unintended to 30%. Since we can accurately track only unintended births (see Technical Notes), Washington's goal is to reduce the annual percentage of births resulting from unintended pregnancies to no more than 30%. PRAMS data showed that 40% ($\pm 4\%$) of 1993-1994 Washington births resulted from unintended pregnancies.

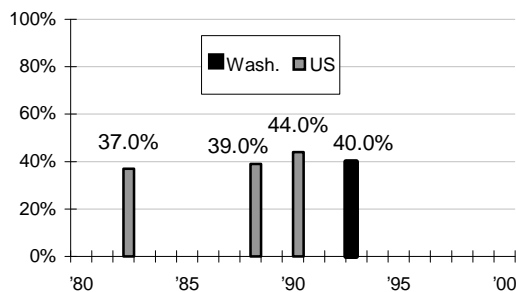
A recent Institute of Medicine review of unintended pregnancy risks, impacts and prevention strategies says the US goal is reasonable and has already been reached by many other industrialized nations.¹ Achieving Washington's goal would result in approximately 7,900 fewer births each year that were unwanted at the time of conception.

While the indicator being monitored is births resulting from unintended pregnancies, efforts to reduce unintended pregnancies could also reduce the approximately 26,000 annual abortions in Washington.

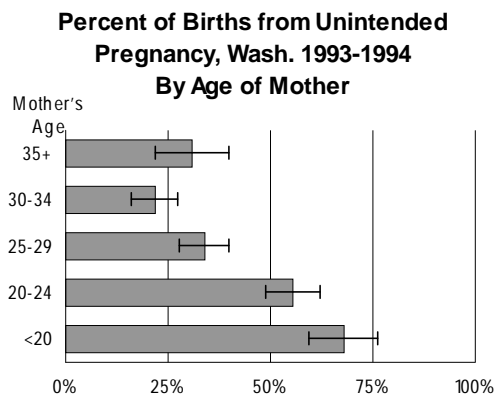
Age

Unintended pregnancies occur most frequently among women at both ends of the reproductive age span. PRAMS data indicate that mothers younger than 20 years of age have the highest percentage of births resulting from unintended pregnancy (68% ± 8). However, unintended pregnancy is not just a problem among teenagers. Among women 20-24, the percentage of births from unintended pregnancies was 56% (± 7). Nearly one-third of mothers 35 years of age and older had births resulting from unintended pregnancy (31% ± 9). Births resulting from unintended pregnancies were lowest among mothers age 30-34 (22% ± 6). The actual numbers of unintended pregnancies are highest among 25-

Unintended Births
Percent of All Births



29 year olds because more women in that age group get pregnant.



Race and Ethnicity

Variations according to race and ethnicity for Washington are not available from PRAMS data. Data from the 1990 National Survey of Family Growth show that US births resulting from unintended pregnancy are more common among black women (62%) than among white women (42%).

Income and Education

PRAMS data indicate that Washington mothers whose household incomes are below poverty level have the greatest percentage of births resulting from unintended pregnancy among all income groups. Sixty-two percent (± 8) of mothers with incomes below the federal poverty level report births resulting from unintended pregnancies, compared with 29% (± 4) of mothers with incomes above 185% of the federal poverty level.

PRAMS data also show a strong relationship between educational attainment and pregnancy intention. The lower the level of education, the greater the likelihood that the birth resulted from an unintended pregnancy. Fifty-four percent (± 7) of mothers with less than twelve years of education report that their births resulted from unintended pregnancies, compared with 33% (± 5) of mothers who have more than a high school education.

Other Measures of Impact and Burden

Abortion. About half of all unintended pregnancies end in abortion. Although most abortions are outcomes related to unintended pregnancies, an unknown percentage of abortions are medically indicated. In 1994, 26,052 abortions were reported for resident women of Washington. About 80% of

all abortions are obtained by women 20 years of age or older.² Presently, nearly 90% of all abortions are obtained before 12 weeks of gestation, when there is the least risk of complications. Abortions obtained after 12 weeks gestation are at greater risk for morbidity and mortality and are performed at disproportionately higher rates among adolescents.

Morbidity and Mortality in Mothers. The groups in which unintended pregnancy rates are highest, teens and older women, are also the groups at greatest risk for maternal morbidity and mortality. See the Adolescent Pregnancy section for a discussion of the associations between early childbearing and adverse health outcomes.

Women with unintended pregnancies are at greater risk of depression during pregnancy and in the post-partum period. PRAMS data show an association between pregnancy intention and indicators of maternal stress. Over three times as many women whose unintended pregnancies resulted in births reported being arrested, convicted, or jailed (10% ± 3) compared with women whose births were intended (3% ± 1). They are also more likely to report isolation and lack of social support.

Morbidity and Mortality in Children. The Institute of Medicine review noted above indicates that children of unintended pregnancies are more likely than others to be exposed to tobacco and alcohol during pregnancy, to have low birth weight, and to die in their first year of life. PRAMS data show that mothers whose births result from unintended pregnancies are more likely to smoke during the last trimester (21% ± 5) than mothers whose pregnancies are intended (14% ± 4). The risk of alcohol-related birth defects increases when women continue to drink during pregnancy.

Preconception Risk Assessment. Unintended pregnancy limits opportunities for the mother or couple to participate in preconception risk assessment and intervention. For many specific medical problems, preconception interventions are important. Strict metabolic control of maternal diabetes and phenylketonuria reduces the risk of congenital malformation of the fetus. Neural tube defects are reduced through dietary folic acid supplementation before and during the early months of pregnancy. Parents whose pregnancies are unintended may be less likely to get genetic counseling.

Prenatal Care. Women whose pregnancies are unintended are less likely to receive timely or ad-

quate prenatal care. PRAMS data show that mothers who reported their pregnancies were unintended were less likely to begin prenatal care in the first trimester (69%, ± 5) than mothers whose pregnancies were intended (86%, ± 3).

Abuse. Women with unintended pregnancies are at greater risk of physical abuse. PRAMS data indicate they are more likely to have experienced a physical fight during the 12 months prior to birth (unintended 17%, ± 5 , intended 5%, ± 2). Unintended pregnancy may be the result of sexual abuse or nonconsensual sex. Children of unintended pregnancies are more likely to suffer from child abuse, and to receive insufficient resources for healthy growth and development.³

Family Formation. PRAMS data indicate that 42% (± 5) of births resulting from unintended pregnancy were to unmarried women. In addition, couples who marry after unintended conception are more than three times more likely to divorce, according to the Institute of Medicine. PRAMS data indicate that 26% (± 5) of women whose births resulted from unintended pregnancies reported being separated or divorced from partners, compared with 8% (± 2) of women whose births were intended. Children raised by one parent are more than twice as likely to drop out of high school and are more likely to have encounters with the criminal justice system. Female children raised by one parent are almost three times as likely to become teenage mothers.⁴ The fathers of children born of unintended pregnancies are more likely to be absent than other fathers.

Risk and Protective Factors

Contraceptive Use. Nationally, about half of unintended pregnancies occur among the estimated 3.9 million women who are neither using contraception nor seeking to become pregnant, while the other half occur among the estimated 21.2 million women using reversible methods of contraception. Pregnancies occur among contraceptive users because some methods are of limited effectiveness even when used correctly and some methods fail because of difficult compliance regimens. Coitus-dependent methods (e.g., diaphragm, condom) are more susceptible to failure than coitus-independent methods (e.g., IUD, Norplant, Depo-Provera).⁵ In Washington, PRAMS data indicate that 62% (± 5) of births resulting from unintended pregnancy occurred in women who were not using birth control

at the time they conceived. Thirty percent (± 4) of women not using contraception did not intend to be pregnant at that time or ever.

Contraceptive Knowledge and Access. While knowledge is increasing about how to structure school-based curricula to reduce sexual activity and increase contraceptive use once sexual activity has begun, little is known about how to improve the knowledge and skills of adults regarding contraception. Access to contraceptive services can be complicated and is often expensive. Many private health insurance providers do not cover contraception. Nationally, declines in public funding are associated with declines in access to subsidized services.⁶ PRAMS data show that 4% (± 1) of women reported they could not afford birth control.

Personal and Interpersonal Determinants of Contraceptive Use. Research indicates that personal feelings and attitudes have a major influence on contraceptive use. Motivation, parental benefit/burden ratios, ambivalence, and partner support all influence contraceptive use and unintended pregnancy. Non-contracepting PRAMS mothers whose births resulted from unintended pregnancies provided the following reasons for not using birth control: side-effects from contraception (19%, ± 5); dislike of birth control (16%, ± 5); lack of partner support for using contraception (19% ± 7); did not expect to have sex (14%, ± 4).

Socioeconomic and Cultural Influences of Contraceptive Use. Ethnic, cultural, religious, and political beliefs influence opinions and practice regarding sexuality, fertility control, and family formation. Popular media are filled with sexual material, but there is little information on contraception, responsible personal behavior, and values.

High Risk Groups. Groups at high risk for unintended pregnancy include women at either end of the reproductive age span, women in poverty, and women with low levels of educational attainment. Marital status is also strongly correlated with pregnancy intention; 42% (± 5) of births from unintended pregnancy are to unmarried women. Even among currently married women, 31% (± 4) of births resulted from unintended pregnancies.

Intervention Points, Strategies and Effectiveness

The Institute of Medicine review on unintended pregnancy found that although much effort and resources have been expended for programs to address sexual behavior and contraceptive use at the national, state, and local levels, few have been adequately evaluated. Those that have been evaluated are largely targeted toward adolescents.

A possible explanation for the higher rates of adolescent pregnancy, abortion, and childbearing in the US compared with other industrialized countries is that contraceptive services in those countries are more widely available, confidential, and free or inexpensive. In addition, many countries present strong public health messages on wanted children and responsible sexual activity.

The Institute of Medicine review makes the following observations:

- Because of the focus on teens, few studies have been done about how to reach adult men and women (see Adolescent Pregnancy section).
- Evidence is insufficient to determine whether abstinence programs have been effective.
- Programs providing both abstinence and contraception messages are effective in delaying intercourse and encouraging contraceptive use.
- Even programs which encourage contraceptive use are reluctant to provide methods or help participants get access to services.
- About half of the evaluated programs to reduce repeat pregnancy have been successful.
- Little is known about how to influence sexual behavior or contraceptive use by changing socioeconomic or cultural environments.⁷

To achieve national goals, the Institute of Medicine review recommends a new social norm that all pregnancies should be consciously and clearly desired at the time of conception. This would require a long term comprehensive effort to educate the public about the social and public health burdens of unintended pregnancy and to stimulate interventions to reduce such pregnancies. They recommend the following five core goals:

- Improve knowledge about contraception, unintended pregnancy and reproductive

health.

- Increase access to contraception.
- Address the roles that feelings, attitudes, and motivation play in using contraception and avoiding unintended pregnancy.
- Develop and adequately evaluate a variety of local programs to reduce unintended pregnancy.
- Stimulate research to develop new contraception for men and women, answer important questions about how to organize contraceptive services, and understand more fully the determinants and antecedents of unintended pregnancy.⁸

Data Sources

State birth data: (1980-1994) Washington Department of Health, Center for Health Statistics, Prepared by the DOH Maternal-Child Health Program.

Survey data: Pregnancy Risk Assessment Monitoring System (PRAMS), Department of Health, Maternal-Child Health Program.

For More Information

Institute of Medicine, The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families, National Academy Press, Washington, D.C., 1995

Robert Wood Johnson Foundation, Access to Health Care: Key Indicators for Policy, Princeton, New Jersey, 1993.

DHHS, From Data to Action, CDC Press, 1995

Washington Department of Health, Division of Community Health

Technical Notes

PRAMS, a population-based surveillance system, uses birth certificates to survey new mothers who are representative of all registered births to Washington residents. PRAMS was conducted in Washington in 1993 and 1994, and data for the two years have been combined. Since a sample of new mothers was drawn for PRAMS to estimate the population, 95% confidence intervals are presented for all point estimates.

The United States' Year 2000 goal is based on total pregnancies (combination of births and abortions). Washington's Year 2000 goal is based on births resulting from unintended pregnancies. Washington selected a different goal than the US goal due to the technical difficulties of accurately assessing intention among all pregnancies.

In the 55 percent unintended pregnancy rate, unintended births from PRAMS data (51,809 weighted estimate) and all 1993-1994 abortions (53,665) were combined in the numerator. The denominator is the sum of all live births (137,292) and abortions (53,665). This estimate does not adjust for the underreporting of abortion or the small percent of medically indicated abortions among intended pregnancies.

Endnotes

¹ *The Best Intentions: Unintended Pregnancy and the Well Being of Children and Families*, Institute of Medicine, 1995

² *Pregnancy and Induced Abortion Statistics, 1991-1994*, Washington Department of Health, Center for Health Statistics, Feb. 1996

³ *The Best Intentions*

⁴ Ibid.

⁵ Ibid.

⁶ Access to Health Care, RWJ Foundation

⁷ Ibid.

⁸ Ibid.